INTRODUCTION

1- INTRODUCTION

Strawberry (*Fragaria X anannasa* L.) is one of the most important vegetable crops grown in Egypt for fresh consumption, processing and exportation. The acreage devoted to grow strawberry in Egypt was increased and reached about 12700 feddan (fed) with an average yield of 23400t/fed. according to the statistics of Ministry of the Egyption Agriculture in 2009 season. The growth, production and quality of produced strawberry yield are depending on the presence of adequate level of NPK in the soil hence such plants have shallow roots, high productivity and long harvesting season. The response of strawberry to NPK nutrition is still a matter of question due to variation in genotypes, climate, soil type and agricultural practices. Fertilization with NPK plays a great role in strawberry production . In this respect, **Wang and Lin (2002)** reported better effect of using mineral and organic fertilizers as a source for macro-nutrient (NPK) on strawberry growth and productivity. Also within the past few years several nature materials such as amino acids, humic acid and growth stimulants as well as mineral salts which may regulate growth and fruiting of plants have been placed in the market. Many strawberry growers have used these materials and have reported various degrees of success. As with most vegetable enterprises, competition is great and strawberry growers are searching for ways to increase fruit yield, size and quality in an economic manner. Research has been conducted on several crops relating to the effect of such compounds to plant response. In this

respect, **Arancon** *et al.*, **(2003) and Singh** *et al.*, **(2009)** on strawberry and **Shafshak** *et al.*,**(2008)** on tomato reported positive response for using organic and mineral salts on productivity and quality of tested vegetable crops.

Therefore, the present study aims to investigate the effect of applying mineral fertilizers, spray with organic and mineral salts on strawberry plant growth, fruit yield and quality of some strawberry cultivars.